UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/559,726	12/07/2005	Youenn Fablet	01807.107781.	1838

5514 7590 01/21/2009

FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER	
HUSSAIN, IMAD	

ART UNIT	PAPER NUMBER
2451	

MAIL DATE	DELIVERY MODE
01/21/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/559,726	FABLET, YOUENN	
	Examiner	Art Unit	
	IMAD HUSSAIN	2451	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 November 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22,28,29 and 32-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22, 28, 29 and 32-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11 November 2008 has been entered.

2. Applicant's amendment dated 11 November 2008 has been received and made of note.

3. Claims 1, 2, 9, 13, 19 and 21 have been amended. Claim 35 has been added as a new claim.

4. Applicant's amendment has obviated previously raised claim objections. As such, these objections are withdrawn.

5. Applicant's amendment has obviated previously raised specification objections. As such, these objections are withdrawn.

6. Claims 1-22, 28, 29 and 32-35 are pending in application 10/559,726.

Response to Arguments

7. Applicant's arguments, see pages 14-16 of remarks, filed 11 November 2008, with respect to the rejection(s) of claim(s) 1-22, 28, 29 and 32-34 under 35 U.S.C. 103 have been fully considered but they are not persuasive.

Applicant argues that "a descriptor of binary data included in a multimedia document does not teach or suggest an abstract constraint associated with a binary multimedia document" in reference to the combination of *Chinnici, Hsu* and *Hunter*.

In response to Applicant's arguments against the references individually, Applicant is reminded that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Examiner respectfully disagrees with Applicant's interpretation of the prior art.

Chinnici teaches *a first abstract part* ["abstract functionality"] *adapted to describe at least one message* ["describes Web services starting with the *messages*... described abstractly"] *exchanged over the communication network when the service is implemented* [Chinnici: Page 5 Section 1 Paragraphs 2-3], *wherein said first abstract part comprises a description of abstract constraints* ["key constraints" and "message parts and their constraints"] *associated with a document* [Chinnici: Page 32 Section 2.13 Paragraph 2 and Page 36 Section 3.2 Paragraph 1]. Clearly Chinnici teaches abstract constraints associated with a document, though not a binary multimedia document. Chinnici also does not explicitly disclose the use of an extraction process.

Hsu teaches *extracting*, from the document, the parts and *content description associated with the document* [Hsu: Paragraph 0005]. Clearly Hsu teaches the extraction process.

Hunter teaches a description document format for binary multimedia documents [Hunter: Page 2 ("Multiple media types")]. Clearly Hunter teaches the use of a set of abstract constraints along with an associated binary multimedia file.

Moreau teaches a description document format for binary multimedia documents [Moreau: Figure 2]. Clearly Moreau teaches the use of a set of abstract constraints along with an associated binary multimedia file.

Therefore, the combination of Chinnici, Hsu, and Hunter as well as the combination of Chinnici, Hsu, and Moreau teach the claimed invention.

Claim Objections

8. Claims 1, 2, 9, 13, 19 and 21 are objected to because of the following informality: the limitation "extracting a content description depending on the abstract constraints associated with the multimedia document" is ambiguous. It is unclear whether the extraction depends on the abstract constraints or the content description depends on the abstract constraints. In the former case, it is furthermore unclear under what circumstances the extraction would or would not occur. Moreover, it is unclear whether it is the abstract constraints or the content description that is associated with the multimedia document. For purposes of examination, this limitation will be read as "extracting a content description if abstract constraints associated with the multimedia document are existent." Appropriate correction is required.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robert Chinnici et al. (*Web Services Description Language (WSDL) V1.2*, hereinafter *Chinnici*) in view of Liang H. Hsu et al. (US 2003/0051216, hereinafter *Hsu*) and in further view of Jane Hunter et al. (*An Overview of the MPEG-7 Description Definition Language (DDL) Proposals*, hereinafter *Hunter*).

Regarding claim 1, Chinnici discloses *a computer-readable storage medium storing control logic for causing a computer to implement a method of offering a service, described in a service description document* [Chinnici: Abstract], *in a communication network, said method comprising:*

-a first abstract part ["abstract functionality"] *adapted to describe at least one message* ["describes Web services starting with the *messages*... described abstractly"] *exchanged over the communication network when the service is implemented* [Chinnici: Page 5 Section 1 Paragraphs 2-3], *wherein said first abstract part comprises a description of abstract constraints* ["key constraints" and "message parts and their constraints"] *associated with a document* [Chinnici: Page 32 Section 2.13 Paragraph 2 and Page 36 Section 3.2 Paragraph 1]*; and*

-a second concrete part ["framework for describing the concrete details… for SOAP 1.2"] *adapted to describe information relating to transmission of the messages over the communication network* [Chinnici: Page 5 Section 1 Paragraphs 2-3, "messages... bound to a concrete network protocol and message format"],

Chinnici does not explicitly disclose:

-extracting, from the document, the parts and *content description* if abstract constraints associated with the multimedia document are existent*;*

-comparing the content description and the description of the abstract constraints; and

-transmitting an error message, if the content description does not satisfy the abstract constraints.

However, Hsu discloses:

-extracting, from the document, the parts and *content description* if abstract constraints associated with the multimedia document are existent [Hsu: Paragraph 0005]*;*

-comparing the content description and the description of the abstract constraints; and [Hsu: Paragraph 0053 and Claim 4]

-transmitting an error message, if the content description does not satisfy the abstract constraints [Hsu: Claim 2].

Chinnici and Hsu are analogous art in the same field of endeavor as both deal with XML schemas for service description and delivery. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the

validation scheme of Hsu for validating documents and alerting users of errors in the system of Chinnici. One of ordinary skill in the art would have been motivated to modify the system of Chinnici with the validation scheme of Hsu because in doing so, the system would allow users to catch and correct document errors.

The combination of Chinnici and Hsu does not explicitly disclose that the document is a *binary multimedia document*.

However, Hunter discloses a description document format for binary multimedia documents [Hunter: Page 2 ("Multiple media types")].

Chinnici-Hsu and Hunter are analogous art in the same field of endeavor as both deal with XML schemas for service description and delivery. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the MPEG-7 scheme of Hunter for multimedia documents in the system of Chinnici-Hsu. One of ordinary skill in the art would have been motivated to modify the system of Chinnici-Hsu with the MPEG-7 scheme of Hunter because in doing so, the system would adhere to multimedia XML standards, including support for multiple media types [Hunter: Page 2 ("Multiple media types")].

Regarding claim 2, the combination of Chinnici-Hsu and Hunter discloses that *said description of the abstract constraints is represented using the semantics of a description language of a content of the binary multimedia document* [Hunter: Title

("MPEG-7 Description Definition Language"), Page 2 ("Multiple media types") and Page 3 ("Validation of constraints")].

Regarding claim 3, Chinnici-Hsu-Hunter discloses that *said description of abstract constraints is represented using the semantics defined by a Moving Picture Experts Group 7 (MPEG7) standard* [Hunter: Title ("MPEG-7 Description Definition Language"), Page 2 ("Multiple media types") and Page 3 ("Validation of constraints")].

Regarding claim 4, Chinnici-Hsu-Hunter discloses that *said description of abstract constraints is represented in a mark-up language of the Extensible Mark-up Language (XML) type* [Hunter: Title ("MPEG-7 Description Definition Language"), Page 1 ("XML should be used as the syntax for MPEG-7") and Page 3 ("Validation of constraints")].

Regarding claim 5, Chinnici-Hsu-Hunter discloses that *said description of abstract constraints* [Hunter: Page 3 ("Validation of constraints")] *is represented in a schema language such as XML-Schema* [Hunter: Page 1 Last Sentence], *tags* [Hunter: Page 17 ("Properties and Attributes")] *being defined using the semantics of the Moving Picture Experts Group 7 (MPEG7) standard* [Hunter: Page 18 Example].

Regarding claim 6, Chinnici-Hsu-Hunter discloses that *said description of abstract constraints is represented in a description language of a content of the multimedia document* [Hunter: Title ("MPEG-7 Description Definition Language"), Section 2 Page 2

("Multiple media types") and Section 2 Page 3 ("Validation of constraints")], *tags being adapted to integrate directly or by reference attributes represented in a schema mark-up language such as XML-Schema* [Hunter: Page 17 ("Properties and Attributes are equivalent to XML elements and attributes respectively")].

Regarding claim 7, Chinnici-Hsu-Hunter discloses that *the description language of a content of the multimedia document is defined according to the Moving Picture Experts Group 7 (MPEG7) standard* [Hunter: Title ("MPEG-7 Description Definition Language")].

Regarding claim 8, Chinnici-Hsu-Hunter discloses that *said description of abstract constraints is represented in a schema language* [Hunter: Page 1 Last Sentence] *adapted to define a set of minimum constraints* [Hunter: Page 8 Paragraph 3 and sub-bullets].

Regarding claim 9, Chinnici-Hsu-Hunter teaches that *said description of abstract constraints is inserted in a sub-part of said first abstract part, and is adapted to describe an abstract structure of the messages exchanged* [Chinnici: Page 7 Section 2.1.1 Paragraph 1].

Regarding claim 10, Chinnici-Hsu-Hunter teaches that *said first abstract part comprises a second sub-part adapted to declare at least one elementary message pointing to said description of the abstract contents* [Chinnici: Page 7 Section 2.1.2 Paragraph 2].

Regarding claim 11, Chinnici-Hsu-Hunter teaches that *the elementary message is associated with an attribute* [Chinnici: Page 7 Section 2.1.2 Bullet 3] *adapted to specify that the message comprises a binary multimedia content type* [Hunter: Page 17 Figure 3 and Abstract].

11. Claims 12, 19, 20 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Chinnici* in view of *Hsu* in view of Jean-Jacques Moreau (US 2003/0028559, hereinafter *Moreau*) in further view of Mark W. Newman et al. (US 2003/0028559, hereinafter *Newman*).

Regarding claims 12 and 29, *Chinnici* discloses *a method of producing a request for a service offered by a server in a communication network, wherein the service is described in a service description document* [Chinnici: Page 5 Section 1], *the method comprising:*

-selecting a first abstract part of the service description document, wherein the first abstract part is adapted to describe at least one message exchanged over the communication network when an operation associated with the service is implemented [Chinnici: Page 5 Section 1]*;*

Chinnici does not explicitly disclose:

-reading the service description document;

-comparing the content description and the description of the abstract constraints extracted from the service description document; and

-extracting a description of abstract constraints, wherein the description of the abstract constraints is associated with a binary multimedia document.

-extracting a content description if abstract constraints associated with the multimedia document are existent

However, Hsu teaches:

-reading the service description document [Hsu: Paragraph 0005]*;*

-comparing the content description and the description of the abstract constraints extracted from the service description document [Hsu: Paragraph 0053 and Claim 4]*; and*

-extracting a description of abstract constraints, wherein the description of the abstract constraints is associated with a binary multimedia document [Hsu: Paragraph 0005]

-extracting a content description if abstract constraints associated with the multimedia document are existent [Hsu: Paragraph 0005].

Chinnici and Hsu are analogous art in the same field of endeavor as both deal with XML schemas for service description and delivery. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the validation scheme of Hsu for validating documents and alerting users of errors in the system of Chinnici. One of ordinary skill in the art would have been motivated to modify

the system of Chinnici with the validation scheme of Hsu because in doing so, the system would allow users to catch and correct document errors.

The combination of Chinnici and Hsu does not explicitly disclose:

-producing a request for the server in the communication network, wherein the request includes the binary multimedia document selected;

-transmitting the request to the server, if the content description satisfies the abstract constraints.

However, Moreau teaches:

-producing a request for the server in the communication network, wherein the request includes the binary multimedia document selected [Moreau: Paragraph 0118]*;*

-transmitting the request to the server, if the content description satisfies the abstract constraints [Moreau: Paragraph 0118].

Chinnici-Hsu and Moreau are analogous art in the same field of endeavor as both deal with XML schemas for service description and delivery. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the request scheme of Moreau for requesting services in the system of Chinnici-Hsu. One of ordinary skill in the art would have been motivated to modify the system of Chinnici-Hsu with the request scheme of Moreau because in doing so, the system would allow for transmitting requests along with data and avoid excess delays or filesize increases [Moreau: Paragraph 0014].

The combination of Chinnici-Hsu and Moreau does not explicitly disclose *selecting the binary multimedia document according to the description of the abstract constraints*.

However, Newman teaches *selecting the binary multimedia document according to the description of the abstract constraints* [Newman: Paragraph 0138].

Chinnici-Hsu-Moreau and Newman are analogous art in the same field of endeavor as both deal with schemas for service description and delivery. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the filtering scheme of Newman for selecting documents in the system of Chinnici-Hsu-Moreau. One of ordinary skill in the art would have been motivated to modify the system of Chinnici-Hsu-Moreau with the filtering scheme of Newman because in doing so, the system would be prohibited from selecting invalid files.

Regarding claim 19, Chinnici discloses *a device for producing a request for a service offered by a server in a communication network, wherein the service is described in a service description document* [Chinnici: Page 5 Section 1], *the device comprising:*

-selecting a first abstract part of the service description document, wherein the first abstract part is adapted to describe at least one message exchanged over the communication network when an operation associated with the service is implemented [Chinnici: Page 5 Section 1 Paragraphs 1-3]*;*

Chinnici does not explicitly disclose:

-reading the service description document;

-extracting a description of abstract constraints associated with a document from the service description document;

-extracting a content description if abstract constraints associated with the multimedia document are existent;

-comparing the content description and the description of the abstract constraints extracted from the service description document;

However, Hsu discloses:

-reading the service description document [Hsu: Paragraph 0005];

-extracting a content description if abstract constraints associated with the multimedia document are existent [Hsu: Paragraph 0005]*;*

-extracting a content description associated with the document [Hsu: Paragraph 0005]*;*

-comparing the content description and the description of the abstract constraints extracted from the service description document [Hsu: Paragraph 0053 and Claim 4]*;*

Chinnici and Hsu are analogous art in the same field of endeavor as both deal with XML schemas for service description and delivery. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the validation scheme of Hsu for validating documents and alerting users of errors in the system of Chinnici. One of ordinary skill in the art would have been motivated to modify the system of Chinnici with the validation scheme of Hsu because in doing so, the system would allow users to catch and correct document errors.

The combination of Chinnici and Hsu does not explicitly disclose:

-that the document is a *binary multimedia document; and*

-means for reading, selecting, extracting, comparing and *producing a request for the service offered by the server in the communication network, if the content description satisfies the abstract constraints, wherein the request includes the binary multimedia document selected.*

However, Moreau discloses:

-that the document is a *binary multimedia document* [Moreau: Paragraph 0007 "binary data representing… a digital image"]*; and*

-means for reading ["CPU"], selecting ["CPU"], extracting ["CPU"], comparing ["CPU"] and *producing* [Moreau: "CPU" and "Communication Interface", Paragraph 0166 and Figure 5] *a request for the service offered by the server in the communication network, if the content description satisfies the abstract constraints, wherein the request includes the binary multimedia document selected* [Moreau: Paragraph 0118].

Chinnici-Hsu and Moreau are analogous art in the same field of endeavor as both deal with XML schemas for service description and delivery. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the hardware implementation of Moreau for physically realizing a service system in the system of Chinnici-Hsu. One of ordinary skill in the art would have been motivated to modify the system of Chinnici-Hsu with the implementation scheme of Moreau because in doing so, the system would allow for physically realizing a service system.

The combination of Chinnici-Hsu and Moreau does not explicitly disclose *selecting the binary multimedia document according to the description of the abstract constraints*.

However, Newman discloses *selecting the binary multimedia document according to the description of the abstract constraints* [Newman: Paragraph 0138].

Chinnici-Hsu-Moreau and Newman are analogous art in the same field of endeavor as both deal with schemas for service description and delivery. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the filtering scheme of Newman for selecting documents in the system of Chinnici-Hsu-Moreau. One of ordinary skill in the art would have been motivated to modify the system of Chinnici-Hsu-Moreau with the filtering scheme of Newman because in doing so, the system would be prohibited from selecting invalid files.

Regarding claim 20, the combination of Chinnici-Hsu and Moreau discloses:

-a microprocessor [Moreau: Paragraph 0166];

-a read only memory adapted to store a program for producing the request for the service [Moreau: Paragraph 0166]; and

-a random access memory including registers adapted to store variables modified during the execution of the program [Moreau: Paragraph 0166].

12. Claims 13, 21-22 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Moreau* in view of *Hsu* in further view of *Chinnici*.

Regarding claims 13 and 28, Moreau discloses *a method of validating a binary multimedia* [Moreau: "image"] *document when a service offered by a server in a communication network is implemented* [Moreau: Paragraphs 0008 and 0116], *characterized in that it comprises the following steps* [Moreau: Paragraph 0124]*:*

-acquiring the binary multimedia document [Moreau: Paragraph 0120 and Figure 2 S30];

-implementing the service on binary the multimedia document, if the content description satisfies the abstract constraints [Moreau: Paragraph 0150 and Figure 2 S33].

Moreau does not explicitly disclose:

-extracting a description of abstract constraints associated with a binary multimedia document from the service description document;

-extracting a content description if abstract constraints associated with the multimedia document are existent; and

-comparing the content description and the description of abstract constraints extracted from the document.

However, Hsu discloses:

-extracting, from the document, the *abstract constraints* and *content description if abstract constraints associated with the multimedia document are existent* [Hsu: Paragraph 0005]*;*

-comparing the content description and the description of the abstract constraints; and [Hsu: Paragraph 0053 and Claim 4]

Moreau and Hsu are analogous art in the same field of endeavor as both deal with XML schemas for service description and delivery. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the validation scheme of Hsu for validating documents and alerting users of errors in the system of Moreau. One of ordinary skill in the art would have been motivated to modify the system of Moreau with the validation scheme of Hsu because in doing so, the system would allow users to catch and correct document errors.

The combination of Moreau and Hsu does not explicitly disclose *the service being associated with a service description document*.

However, Chinnici discloses *the service being associated with a service description document* [Chinnici: Page 5 Section 1, "Web Service Description Language provides a model and an XML format for describing Web services"].

Moreau-Hsu and Chinnici are analogous art in the same field of endeavor as both deal with XML schemas for service description and delivery. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the service description document scheme of Chinnici for describing services using XML in the service system of Moreau-Hsu. One of ordinary skill in the art would have been motivated to modify the system of Moreau-Hsu with the service description document scheme of Chinnici because in doing so, the system would allow for standards-compliance and increased interoperability [Chinnici: Page 1 Abstract].

Regarding claim 21, Moreau discloses *a device for validating a multimedia document during the implementation of a service offered by a server in a communication network* [Moreau: Paragraphs 0008-0009], *the device comprising:*

-means ["communication interface"] *for acquiring the multimedia document* [Moreau: Figure 5 (1, 110)]*;*

-means ["CPU"] *for extracting* [Moreau: Figure 5 (100)]*;*

-means ["CPU", "RAM"] *for comparing* [Moreau: Figure 5 (100, 102)].

Moreau does not explicitly disclose:

-extracting a description of abstract constraints associated with the binary multimedia document from the document;

-extracting a content description associated with the multimedia document; and

-comparing the content description and the description of the abstract constraints extracted from the document.

However, Hsu discloses:

-extracting a description of abstract constraints associated with the binary multimedia document from the document [Hsu: Paragraph 0005]*;*

-extracting a content description if abstract constraints associated with the multimedia document are existent [Hsu: Paragraph 0005]*; and*

-comparing the content description and the description of the abstract constraints extracted from the document [Hsu: Paragraph 0053 and Claim 4].

Moreau and Hsu are analogous art in the same field of endeavor as both deal with XML schemas for service description and delivery. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the validation scheme of Hsu for validating documents and alerting users of errors in the system of Moreau. One of ordinary skill in the art would have been motivated to modify the system of Moreau with the validation scheme of Hsu because in doing so, the system would allow users to catch and correct document errors.

The combination of Moreau and Hsu does not explicitly disclose *the service being associated with a service description document*

However, Chinnici discloses *the service being associated with a service description document* [Chinnici: Page 5 Section 1].

Moreau-Hsu and Chinnici are analogous art in the same field of endeavor as both deal with XML schemas for service description and delivery. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the service description document scheme of Chinnici for describing services using XML in the service system of Moreau-Hsu. One of ordinary skill in the art would have been motivated to modify the system of Moreau-Hsu with the service description document scheme of Chinnici because in doing so, the system would allow for standards-compliance and increased interoperability [Chinnici: Page 1 Abstract].

Regarding claim 22, Moreau-Hsu-Chinnici discloses that the device is incorporated in:

-a microprocessor [Moreau: Figure 5 (100)]*;*

-a read only memory adapted to store a program for validating the multimedia document [Moreau: Figure 5 (101)]*; and*

-a random access memory including registers adapted to store variables modified during the execution of the program [Moreau: Figure 5 (102)].

13. Claims 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Moreau*, *Hsu* and *Chinnici* as applied to claim 13 above in further view of *Hunter*.

Regarding claim 14, the combination of Moreau-Hsu and Chinnici does not disclose that *said description of the abstract constraints is represented in a language describing a content of the multimedia document.*

However, Hunter discloses that *said description of the abstract constraints is represented in a language describing a content of the multimedia document* [Hunter: Title ("MPEG-7 Description Definition Language"), Page 2 ("Multiple media types") and Page 3 ("Validation of constraints")].

Moreau-Hsu-Chinnici and Hunter are analogous art in the same field of endeavor as both deal with XML schemas for representing multimedia data. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the MPEG-7 scheme of Hunter for multimedia documents in the system of Moreau-Hsu-Chinnici. One of ordinary skill in the art would have been motivated to

modify the system of Moreau-Hsu-Chinnici with the MPEG-7 scheme of Hunter because in doing so, the system would adhere to multimedia XML standards, including support for multiple media types [Hunter: Page 2 ("Multiple media types")].

Regarding claim 15, the combination of Moreau-Hsu-Chinnici and Hunter discloses that *the language describing a content of the multimedia document is defined under the Moving Pictures Expert Group (MPEG-7) standard* [Hunter: Title ("MPEG-7 Description Definition Language")].

Regarding claim 16, Moreau-Hsu-Chinnici-Hunter discloses that*, at the said content description extraction step* [Hsu: Paragraph 0005 and Moreau: Figure 2 S32-S33 and Paragraph 0018 ("set of data")]*, an Moving Pictures Expert Group (MPEG-7) description* [Hunter: Title ("MPEG-7 Description Definition Language")] *of the multimedia document inserted in the multimedia document is extracted*.

Regarding claim 17, Moreau-Hsu-Chinnici-Hunter discloses that the validation method can be *implemented during a step of selecting the multimedia document to be inserted in a message exchanged during implementation of the service offered by a server in the communication network* [Moreau: Paragraph 149 ("the identification… can be performed at any hierarchical level of the XML document")].

Regarding claim 18, Moreau-Hsu-Chinnici-Hunter discloses that the validation method can be *implemented during a step of validating a request received by the server in the communication network for implementing the service described in the service description document* [Moreau: Paragraph 149 ("the identification… can be performed at any hierarchical level of the XML document")].

14. Claims 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Chinnici*, *Hsu* and *Hunter* as applied to claims 5, 6 and 8 in view of Brent A. Carlson et al. (US 2004/0205573, hereinafter *Carlson*).

Regarding claim 32, Chinnici-Hsu-Hunter teaches *the method according to claim 5.*

Chinnici-Hsu-Hunter does not explicitly disclose that *the abstract constraints are represented in a XML-Schema language or in a Relax-NG language.*

However, Carlson teaches that *the abstract constraints are represented in a XML-Schema language or in a Relax-NG language* [Carlson: Paragraph 0004].

Chinnici-Hsu-Hunter and Carlson are analogous art in the same field of endeavor as both deal with XML schemas for service description and delivery. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the language scheme of Carlson for using a standardized XML schema language in the system of Chinnici-Hsu-Hunter. One of ordinary skill in the art would have been motivated to modify the system of Chinnici-Hsu-Hunter with the language scheme of

Carlson because in doing so, the system would adhere to XML standards [Carlson: Paragraph 0004].

Regarding claim 33, Chinnici-Hsu-Hunter teaches *the method according to claim 6.*

Chinnici-Hsu-Hunter does not explicitly disclose that *the attributes are represented in a XML-Schema language.*

However, Carlson teaches that *the attributes are represented in a XML-Schema language* [Carlson: Paragraph 0004].

Chinnici-Hsu-Hunter and Carlson are analogous art in the same field of endeavor as both deal with XML schemas for service description and delivery. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the language scheme of Carlson for using a standardized XML schema language in the system of Chinnici-Hsu-Hunter. One of ordinary skill in the art would have been motivated to modify the system of Chinnici-Hsu-Hunter with the language scheme of Carlson because in doing so, the system would adhere to XML standards [Carlson: Paragraph 0004].

Regarding claim 34, Chinnici-Hsu-Hunter teaches *the method according to claim 8.*

Chinnici-Hsu-Hunter does not explicitly disclose that *the description of the abstract constraints is represented in a Schematron language.*

However, Carlson teaches that *the description of the abstract constraints is represented in a Schematron language* [Carlson: Paragraph 0004].

Chinnici-Hsu-Hunter and Carlson are analogous art in the same field of endeavor as both deal with XML schemas for service description and delivery. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the language scheme of Carlson for using a standardized XML schema language in the system of Chinnici-Hsu-Hunter. One of ordinary skill in the art would have been motivated to modify the system of Chinnici-Hsu-Hunter with the language scheme of Carlson because in doing so, the system would adhere to XML standards [Carlson: Paragraph 0004].

15. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Moreau*, *Hsu* and *Chinnici* as applied to claim 13 above in view of Ali Tabatabai et al. (US 2003/0031260 A1, hereinafter *Tabatabai*).

Regarding claim 35, Moreau-Hsu-Chinnici does not explicitly disclose:

-reiterating the extraction step, if a characteristic of the description is missing.

-that the description is a *Moving Picture Experts Group 7 (MPEG7) description.*

-adding said characteristic to the description.

However Tabatabai teaches:

-reiterating the extraction step, if a characteristic of the description is missing [Tabatabai: Figure 7 (loop)].

-that the description is a *Moving Picture Experts Group 7 (MPEG7) description* [Tabatabai: Paragraph 0008].

-adding said characteristic to the description [Tabatabai: Step 318].

Moreau-Hsu-Chinnici and Tabatabai are analogous art in the same field of endeavor as both deal with XML schemas for representing multimedia data. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the MPEG-7 scheme of Tabatabai for multimedia documents in the system of Moreau-Hsu-Chinnici. One of ordinary skill in the art would have been motivated to modify the system of Moreau-Hsu-Chinnici with the MPEG-7 scheme of Tabatabai because in doing so, the system would adhere to multimedia XML standards.

Conclusion

16. **Examiner's Note:** Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the text of the passage taught by the prior art or disclosed by the examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to IMAD HUSSAIN whose telephone number is (571) 270-3628. The examiner can normally be reached on Monday through Friday from 0800 to 1700.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/IH/
Imad Hussain
Examiner, Art Unit 2451

/Salad Abdullahi/

Primary Examiner, Art Unit 2457